

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/810,332
				Filing Date	March 25, 2004
				First Named Inventor	Mikhail Belov et al.
				Art Unit	2881
Examiner Name	Unassigned				
Sheet	1	of	2	Attorney Docket Number	29191-712.201

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
len		US-4,977,320	12-11-1990	Chowdhury et al.	
		US-5,045,694	09-03-1991	Beavis et al.	
		US-5,245,186	09-14-1993	Chait et al.	
		US-5,396,065	03-07-1995	Myerholtz et al.	
		US-5,545,304	08-13-1996	Smith et al.	
		US-5,572,022	11-05-1996	Schwartz et al.	
		US-5,834,771	11-10-1998	Yoon et al.	
		US-5,917,185	06-29-1999	Yeung et al.	
		US-5,939,612	08-17-1999	Wylie et al.	
		US-5,994,695	11-30-1999	Young	
		US-6,075,244	06-13-2000	Baba et al.	
		US-6,091,502	07-18-2000	Weigl et al.	
		US-6,107,628	08-22-2000	Smith et al.	
		US-6,175,112-B1	01-16-2001	Karger et al.	
		US-6,207,954-B1	03-27-2001	Andrien, Jr. et al.	
		US-6,300,626-B1	10-09-2001	Brock et al.	
		US-6,305,975-B1	10-23-2001	Steiner	
		US-6,316,768-B1	11-13-2001	Rockwood et al.	
		US-6,369,383-B1	04-09-2002	Cornish et al.	
		US-6,465,776-B1	10-15-2002	Moini et al.	
		US-6,495,016-B1	12-17-2002	Nawracala	
		US-6,541,768-B2	04-01-2003	Andrien, Jr. et al.	
		US-6,614,020-B2	09-02-2003	Cornish	
		US-2002/0054289-A1	05-09-2002	Thibault et al.	
		US-2003/0034449-A1	02-20-2003	Miller et al.	
		US-2003/0052269-A1	03-20-2003	Apffel, Jr. et al.	
		US-2003/0071206-A1	04-17-2003	Belov et al.	
		US-2003/0146377-A1	08-07-2003	Miller et al.	
len		US-2003/0146392-A1	08-07-2003	Kimmel et al.	
Examiner Signature	mml		Date Considered	04-28-05	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known		
				Application Number	10/810,332	
				Filing Date	March 25, 2004	
				First Named Inventor	Mikhail Belov et al.	
				Art Unit	2881	
				Examiner Name	Unassigned	
Sheet	2	of	2	Attorney Docket Number		29191-712.201
NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ²
len		BROCK, Ansgar, et al., "Hadamard transform time-of-flight mass spectrometry". Anal. Chem. (1998) 70:3735-3741.				
		COVEY, Thomas R., et al., "Structural characterization of protein tryptic peptides liquid via chromatography/mass spectrometry and collision-induced dissociation of their doubly charged molecular ions". Anal. Chem. (1991), 63:1193-1200.				
		FERNANDEZ, Facundo M., et al., "Hadamard transform time-of-flight mass spectrometry: a high-speed detector for capillary-format separations". Analytical Chemistry (April 1, 2002), 74(7)1611-1617.				
		GEROMANOS, S. et al., "Tuning of an electrospray ionization source for maximum peptide-ion transmission into a mass spectrometer", Analytical Chemistry (2000), 72(4), 777-790.				
		MLYNSKI, V. et al., "Matrix-assisted laser/desorption ionization time-of-flight mass spectrometer with orthogonal acceleration geometry: preliminary results". Rapid Communications in Mass Spectrometry (1996) 10:1524-1530.				
		OTOF Description, Pacific Northwest Laboratory, printed from Internet 01/01/03 << http://www.emsl.pnl.gov:2080/docs/msd/ficr/OTOF_Description.html >>.				
		SCHMITT-KOPPLIN, Philippe et al., "Capillary electrophoresis - mass spectrometry: 15 years of developments and applications", Electrophoresis (2003), 24(13), 2837-2867.				
		SELBY, David S., et al., "Demonstrating the effect of the 'polarised grid geometry' for orthogonal acceleration time-of-flight mass spectrometers". Rapid Communications in Mass Spectrometry (2000) 14:616-617.				
		SHARARA, K., et al., "Development of membrane introduction mass spectrometry for monitoring trace organics in water". Water Science and Technology (2000) 41(10-11):373-380.				
		VESTAL, M., et al., "Resolution and mass accuracy in matrix-assisted laser desorption ionization-time-of-flight". J. Am. Soc. Mass Spectrom (1998), 9:892-911.				
		WILLIAMS, Jon D., et al., "Using accurate mass electrospray ionization-time-of-flight mass spectrometry with in-source collision-induced dissociation to sequence peptide mixtures". Journal of Chromatography A (2003) 1020:11-26.				
len		ZARE, Richard N., et al., "Hadamard transform time-of-flight mass spectrometry: more signal, more of the time". Stanford University, Department of Chemistry, 28 pages.				
Examiner signature		aul		Date Considered	04-28-05	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/810,332
Filing Date	03/25/2004
First Named Inventor	Mikhail BELOV
Art Unit	2881
Examiner Name	Not yet assigned

Sheet	1	of	2	Attorney Docket Number	29191.712.201
-------	---	----	---	------------------------	---------------

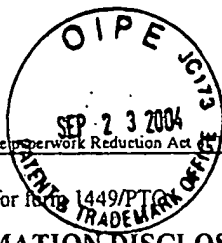
U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Signature	<i>lml</i>	Date Considered	04-28-05
-----------------------	------------	--------------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449/PTO-1449 INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/810,332
				Filing Date	03/25/2004
				First Named Inventor	Mikhail BELOV
				Art Unit	2881
				Examiner Name	Not yet assigned
Sheet	2	of	2	Attorney Docket Number	29191.712.201

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
len		BELOV, Mikahil et al., "Multiplexed orthogonal time of flight mass spectrometry (MOTOF-MS)". American Society of Mass Spectrometry Annual Meeting, (2004), Nashville, TN.	
		LEE, Edgar D. et al., "On-line capillary zone electrophoresis-ion spray tandem mass spectrometry for the determination of dynorphins". <i>Journal of Chromatography</i> (1988), 458:313-321.	
		OLIVARES, Jose A. et al., "On-line mass spectrometric detection for capillary zone electrophoresis". <i>Anal. Chem.</i> (1987), 59:1230-1232.	
len		SMITH, Richard D. et al., "Capillary zone electrophoresis-mass spectrometry using an electrospray ionization interface". <i>Anal. Chem.</i> (1988), 60:436-441.	

Examiner signature	ml	Date Considered	04-28-05
--------------------	----	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.


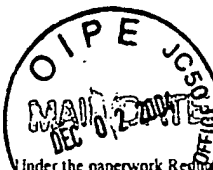
Complete if Known

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)

[illegible][illegible]

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 501.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

2920188_1.DOC
Attorney Docket No. 29191.712.201



 MAIL ROOM CANCELLED

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/810,332
				Filing Date	03/25/2004
				First Named Inventor	Belov
				Art Unit	2881
				Examiner Name	Not yet assigned
Sheet	1	of	2	Attorney Docket Number	29191.712.201

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
len		US-2004/0089803	05/13/2004	Foley	
len		US-2004/0183007	09/23/2004	Belov et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				

Examiner Signature	<i>len</i>	Date Considered	04-28-05
-----------------------	------------	--------------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (08-03)

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/810,332
				Filing Date	03/25/2004
				First Named Inventor	Belov
				Art Unit	2881
				Examiner Name	Not yet assigned
Sheet	2	of	2	Attorney Docket Number	29191.712.201

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
len		Stults et al., US Patent App. No. 10/681,742 entitled "Methods and apparatus for self-optimization of electrospray ionization devices", filed 10/07/2003 (Docket No. 29191.704.201).	
len		Foley et al., US Patent App. No. 10/703,751 entitled "Field termination grid in the ion extraction region of a multiplexed orthogonal time-of-flight mass", filed 11/06/2003 (Docket No. 29191.716.201).	

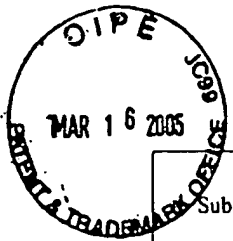
Examiner signature	lul	Date Considered	04-28-05
-----------------------	-----	--------------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/810,332
				Filing Date	03/25/2004
				First Named Inventor	Mikhail BELOV
				Art Unit	2881
				Examiner Name	Lee
Sheet	1	of	1	Attorney Docket Number	29191.712.201

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
UN		US-6,107,625	08/22/2000	Park	
		US-6,437,325	08/20/2002	Reilly et al.	
		US-6,521,887	02/18/2003	Funsten et al.	
UN		US-6,803,564	10/12/2004	Kawato	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ^o
		Country Code ² - Number ³ - Kind Code ⁴ (if known)				

Examiner Signature	<i>Lee</i>	Date Considered	04-28-05
--------------------	------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.